

Amendment and Response
10457ROUS03U (NOR-029)
U.S.S.N. 09/497,107
Page 3

Amendments to the Claims:

Please amend the claims to read as follows:

- subs
BT
C1
1. (Currently Amended) A method of ~~assembly~~ assembling a frame structure of a SDH signal at a hierarchy level N, comprising:
receiving a hierarchically multiplexed administrative unit AU-n comprising a payload and an AU-n pointer;
~~converting~~ translating said AU-n to a tributary unit TU-n; and
hierarchically multiplexing said TU-n into said frame structure, where $n \geq 3$, and gives the granularity of said SDH signal, and said AU-n pointer provides the beginning of said payload with respect to said frame.
2. (Original) A method as claimed in claim 1, wherein said step of converting comprises:
translating said AU-n payload into a TU-n payload; and
transforming said AU-n pointer into a TU-n pointer and aligning said AU-n payload into said TU-n based on said TU-n pointer.
3. (Original) A method as claimed in claim 1, wherein said step of hierarchically multiplexing comprises:
mapping said TU-n into a tributary unit group TUG-n;
hierarchically multiplexing said TUG-n into a higher order TUG-k;
mapping said TUG-k into a higher order virtual container VC-k of same hierarchical level;
aligning said higher order virtual container into a AU-k by providing a AU-k pointer;
mapping said AU-k into a administrative unit group AUG-k and
assembling said frame structure from said AUG-k,
where $k \geq n$.
- ack
on

Amendment and Response
10457ROUS03U (NOR-029)
U.S.S.N. 09/497,107
Page 4

4. (Currently amended) A method as claimed in claim 2, wherein said step of translating said AU-n payload comprises:

mapping the user information from said AU-n payload into said TU-n payload field; and

→ providing fixed stuff bits whenever the size of said TU-n payload field is larger than the area occupied by said user information.

5. (Original) A method as claimed in claim 3, wherein said step of hierarchically multiplexing said TUG-n into a TUG-k comprises:

(a) mapping said TU-n into a TUG-n;

(b) multiplexing said TUG-n into a VC-k;

(c) mapping VC-k into a TU-k by adding a POH field corresponding to a hierarchical level k;

(d) mapping said TU-k into a TUG-k; and

(e) repeating steps (a) to (d) to the hierarchy level N.

6. (Original) A method as claimed in claim 2, wherein $n=3$ and $N=4$ for obtaining a hierarchically multiplexed STM-4.

7. (Original) A method as claimed in claim 6, wherein said step of hierarchically multiplexing comprises:

mapping said TU-3 into a tributary unit group TUG-3;

hierarchically multiplexing said TUG-3 into a TUG-5;

mapping said TUG-5 into a higher order virtual container VC-5 of same hierarchical level;

aligning said higher order virtual container into a AU-5 by providing a AU-5 pointer;

mapping said AU-5 into an administrative unit group AUG-N; and

assembling said frame structure from said AUG-4 group.

Amendment and Response
10457ROUS03U (NOR-029)
U.S.S.N. 09/497,107
Page 5

8. (Original) A method as claimed in claim 2, wherein $n=4$ and $N=4$ for obtaining a hierarchically multiplexed STM-4.
9. (Original) A method as claimed in claim 8, wherein said step of hierarchically multiplexing comprises:
- mapping said TU-4 into a tributary unit group TUG-4;
 - hierarchically multiplexing said TUG-4 into a TUG-5;
 - mapping said TUG-5 into a higher order virtual container VC-5 of same hierarchical level;
 - aligning said higher order virtual container into a AU-5 by providing a AU-5 pointer;
 - mapping said AUG-5 into a administrative unit group AUG-N; and
 - assembling said frame structure from said AUG-4 group.
10. (Currently Amended) A method of assembling a frame structure of a SDH signal comprising:
- receiving a hierarchically multiplexed administrative unit AU-n-mc comprising a concatenated payload and an AU-n-mc pointer;
 - ~~converting~~ translating said AU-n-mc to a tributary unit TU-n-mc; and
 - hierarchically multiplexing said TU-n-mc into said frame structure, where $n \geq 3$, and give the granularity of said speed payload, m is the level of concentration and said AU-n pointer provides the beginning of said payload with respect to said frame.
11. (Original) A method of reducing the number of AU pointers of a very high speed synchronous transport signal STM-N with AU-n granularity, an AU-n unit having an AU pointer and an AU payload, the method comprising:
- for each AU-n unit, hiding said AU-n pointer into said AU payload;
 - translating said AU-n payload to a TU-n payload; and
 - hierarchically multiplexing said TU-n into said frame structure.

Amendment and Response
10457ROUS03U (NOR-029)
U.S.S.N. 09/497,107
Page 6

- BS*
def CI
concl.
12. (Currently Amended) A hierarchically multiplexed signal for transport over a multiplex section of a synchronous network, comprising:
-a payload field with a coarse AU granularity corresponding to the granularity of a higher order tributary, said payload field carrying a plurality of fine granularity AU pointers hidden in a TU pointer area; and
-a section overhead field including a coarse granularity AU pointer.
13. (Original) A signal as claimed in claim 12, wherein said higher order tributary has a minimum size corresponding to an STM-4.
14. (Original) A signal as claimed in claim 13, wherein said higher order tributary has a size corresponding to one of an STM-16, STM-64 and STM-256.
-